

CLAIMS

1. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS",
characterized in that it comprises a suctioning valve (1)
5 defined by a body (2) provided with a chamber (3), where a
selecting obstruction device is assembled (4), formed by a
pin (5) triggered by an upper button (6), which acts
against the action of a spring (7); the chamber (2)
comprises a channel selector (71) below pin 5, which is
10 designed to be occupied by said pin inferior rim (72), such
condition occurring when suctioning valve is triggered (1),
being that the angle between the chamber (3) and a
connection (11) causes the o-rings (8) to always be in a
sealed position, either the valve (1) being under its
15 triggering or rest condition; the pin (5) is provided with
ring neckings (9) on which the sealing o-rings are
assembled (8), which are assembled above and below a
passage opening (10) through which the secretion passes in
the vacuum application moment; such a device is provided
20 with an internal channel (13), that crosses the suctioning
valve (1) body (2), said body (2) is further provided with
a rim connection (14) provided externally with a thread
(15), to which is threaded a tightering element (16), used
to produce the interconnection component (17) coupling,
25 used to produce the plastic sheating (18) imprisonment,
said interconnection component (17) basically comprises
three regions defined as anterior (19), median (20) and
posterior (21), each one of which with a specific object,

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being that the anterior region (19) is provided with ring ribs (22) preferably in three, that act as a sealing means regarding the internal wall external connection (14); the median region (20) incorporates an outlining external wall, with an adequate profile to tightly bind the tightening element (16), allowing the interconnection component (17) to be dislocated axially, thus producing its fixation along the suctioning valve (1) body (2); posterior region (21) incorporates a trunk configuration ending (23), that acts as an adequate place for the plastic sheating positioning (18), being that said ending (23) the positioning place for a retention ring (24), that guaranties sealing and tight positioning of said sheating (18); the interconnection component (17) internally receives the rim of a probe (25), that, depending on its gauge may be assembled either on a tie rod (26), and has the objective of allowing probe use (25) with more than a external diameter measure; the device is further provided with a terminal (30), equipped with a casing (31), where a set of sealing rings (32) is assembled, which is formed by two stiff rings (33), between which a flexible ring (34) is assembled; said casing (31) is closed by a component (35) that adequately presses the ring set (32) and also acts as a plastic sheating anterior rim (18) fixture, being that for the latter object it is provided in said component (35), a trunk ending (36) with a configuration identical to the other trunk ending (23); the trunk ending (36) receives a retention ring (37), identical to the other retention ring (24), assembled on the plastic

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sheating (18) opposed rim.

2. / "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 1, characterized in that the suctioning valve
5 (1) may be conveniently locked, which prevents the pin (5)
from being inadvertently triggered, accidentally
communicating the vacuum in said device.

3. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
10 claimed in 1, characterized in that the connection (11)
incorporates a progressive staggering (12), which allows
the use of varied diameters of vacuum lines.

4. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
15 claimed in 1 and 3, characterized in that the connection
(11) crosses the chamber (3), and is aligned with an
internal channel (13), that crosses the suctioning valve
(1) body (2).

5. "SECRETION SUCTIONING
20 DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 1, characterized in that the tie rod (26) is
provided with a external diameter standardized to allow the
introduction into an interconnection component (17), in
addition to being provided with two internal diameter
25 measures to receive the probe (25), being able to use two
different probe gauges with the use of the tie rod (26),
and two other different gauges without the use of the above
mentioned tie rod (26).

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6. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 1, characterized in that the probe (25) is
provided with a graduation (27), which is representative of
5 its measure length, being that on the above mentioned probe
(25) a limiting and marking way (28) is assembled, which
may be dislocated along said probe.

7. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
10 claimed in 6, characterized in that the limiting and
marking means (28) is provided with opposed protuberances
pair (29), which act in order to produce a relative locking
effect on the external wall of the probe (25), said opposed
protuberances pair (29) thus guaranties a determined effort
15 value to produce the limiting and marking means (28)
dislocation.

8. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 1, characterized in that the terminal (30) is
20 provided with an instillation route (38) defined by a
radial tubular projection (38) that starts from the
terminal wall (30), and receives the tubular sector
coupling (40), which incorporates a closing cap (41); the
terminal (30) presents a connection (42) that externally
25 receives a tightering element (43), used to produce the
coupling of sphere valve (45) body (44).

9. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as

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claimed in 8, characterized in that the instillation route (38) is provided with a diaphragm (73).

10. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
5 claimed in 8, characterized in that the tightening element
(43) acts on a thread (46) incorporated in a tubular
projection (47) provided on the sphere valve (45) body
(44); the sphere valve (45) body (44) is divided into two
portions (48) and (49), each one of these incorporating
10 half of the chamber (50) that covers the sphere shaped
element (51), which is formed by a central section (52)
equipped with a transversal channel (53), and by two
supplementary sections (54); the sphere shaped element (51)
is driven by an external and upper handle (55) which can be
15 turned along an angular range of 90 degrees between two
basic positions, that determine whether the transversal
channel (53) is aligned or not with the longitudinal
geometric axis of the sphere valve (45) body of the valve
(44).

20 11. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 10, characterized in that the sphere valve (45)
has the function of isolating the internal environment in
which it the probe (25) is found, allowing or not its
25 passage towards the patient/ventilator connection (56).

12. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 10 and 11, characterized in that the sphere

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valve (45) presents a color code that eases its operational condition visualization, i. e., whether open or closed to the probe (25) passage.

13. "SECRETION SUCTIONING

5 DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as claimed in 12, characterized in that the color code is defined by the fact that the central section (52) present a different coloring from the two supplementary sections (54).

14. "SECRETION SUCTIONING

DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as claimed in 13, characterized in that in a preferred combination for the sphere valve (45) color code, the central section (52) of the sphere shaped element presents a green color, and the corresponding supplementary sections (54) present a red color.

15. "SECRETION SUCTIONING

DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 11, characterized in that the patient/ventilator
connection (56) is provided with a derivation (57) that
20 communicates the ventilating equipment, said connection
(56) is further provided with another connection (58) which
is connected to the patient's coupling tube.

16. "SECRETION SUCTIONING

25 DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as claimed in 15, characterized in that the derivation (57) is incorporated in a manner as to present an inclination angle that helps maintain of a non turbulent laminar air flow.

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17. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 11, characterized in that the patient
/ventilator connection (56) incorporates sealing rings or
5 rings type (60), assembled on corresponding terminals (61).

18. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 11, characterized in that the patient
/ventilator connection (56) incorporates a round wall
10 sector (62) that deviates the air flow entrance angle in a
smooth and progressive manner.

19. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 1, characterized in that the valve (1) presents
15 a anatomic and inclined shape, which provides better
suctioning, with less fatigue for the operator, as well as
total sealing of the system, being the latter aspect
related to the tightening element (16) and the
interconnection component (17), thus avoiding the secretion
20 accumulation.

20. "SECRETION SUCTIONING
DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as
claimed in 1, characterized in that that such a device is
provided with a triple sealing, through the rings (33) and
25 (31), allowing a more effective sealing effect of the
external part of the probe (25).

21. "KIT PROVIDED WITH A
SECRETION SUCTIONING DEVICE FOR INTUBATED OR

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TRACHEOSTOMIZED PATIENTS", intended for the assembly of a device for the tracheal secretion suctioning of intubated or tracheostomized patients, characterized in that said kit (63) is provided with a package (64) that covers, in addition to the suctioning device, elements that help in its disposal after use, those elements being a plastic sheating (65) and a tube (66), the latter being used to connect both device endings; package 64 presents defined spaces and divided by divisor walls (67), allowing each covered element to occupy a previous studied place.

22. "KIT PROVIDED WITH A SECRETION SUCTIONING DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as claimed in 21, characterized in that it presents a structure (68), where a determined number of packages (64) can be adequately stored, said structure (68) is provided with one or two parallel horizontal bars (69) that act as a hanger for the packings.

23. "KIT PROVIDED WITH A SECRETION SUCTIONING DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as claimed in 22, characterized in the structure (68) incorporates a frontal panel (70) in which the instructions are presented for use of such suctioning device.

24. "KIT PROVIDED WITH A SECRETION SUCTIONING DEVICE FOR INTUBATED OR TRACHEOSTOMIZED PATIENTS", as claimed in 21, characterized in that it is able to incorporate, separately or jointly, three accessories (F), (F') and (F''), that respectively

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represent an endotracheal tube fixture, a humidifying filter, and a secretion collection flask, those being able to occupy a defined space (E) in the interior of the package (64).

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